

## ABSTRACT

A high-quality gray scale printing is attained by using an ink jet recording head having a simple and low-cost configuration and a general-purpose structure, and ink having common components.

An ink jet recording head driving method to be disclosed comprises repeating a plurality of times a dot forming process for forming a plurality of dots on a recording medium, while an ink jet recording head is moved in a sub-scanning direction; the process comprising the steps of moving the ink jet recording head in a main scanning direction, generating a plurality of drive waveform signals according to a jet amount of ink droplets, selecting any one or none of the plurality of waveform signals for each of a plurality of nozzles according to gray scale information of printing data, and applying voltage to corresponding piezoelectric actuators.